

CLEAN VERSION OF AMENDED SPECIFICATION PARAGRAPHS

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SUMMARY OF THE INVENTION

A substantially skinless cleaning roller of polyvinyl acetal having a uniform small pore size throughout the material in which over 90% of the pores of the material range from 7 - 40 microns in diameter with a mean flow pore diameter of about 20 microns and a mean flow pore pressure of 0.334 PSI. The flow rate through the material provide a dry flow ranging from 95.0 L/min to 25.0 L/min and a wet flow of about 80.0 L/min to 6.5 L/min.

to clean semiconductors in the inventive rollers had greater strength and greater durability.

In a specific embodiment, the devices are made using a suitable material that is firm, porous, elastic, and has certain abrasion resistiveness. The primary raw starting material for the device is air blown polyvinyl alcohol which is used to form a polyvinyl acetal porous elastic material with a uniform cell structure. The porous material varies in characteristic depending upon cleanliness, type of pore forming agent or process, type of aldehyde employed for the conversion of a polyvinyl alcohol to a polyvinyl acetal, and other factors. These factors also include the relative proportions of reactants, reaction temperature and time, and the general condition and starting materials in the manufacturing process.